To: Petri, Elliott[Elliott.Petri@WestonSolutions.com]; Way, Steven[way.steven@epa.gov]; Matt Francis[m.francis@erllc.com]; Griswold, Hays[Griswold.Hays@epa.gov]
Cc: Ray Eldridge[ray.eldridge@deereault.com]; Karl Fritz[karl.fritz@deereault.com]; Don Deere[don.deere@deereault.com]
From: Christoph Goss
Sent: Fri 10/2/2015 12:54:15 AM
Subject: RE: Flow Control Structure and Sump
GOLD KING MINE CONTROL.txt

Hi Elliott

We need the manhole location in a planar coordinate system. The attached file gives the northings and eastings of the coordinate system used by Goff. The last point listed is the east control point that the San Juan Surveyors tied into.

Point ID, Northing, Easting, elevation, name
1002,1454124.89,2383085.10,11439.88,FNDSOC-2.75BC M&G

All:
Given a Manhole Surface Elevation of 11438.09 (Goff benchmark), that gives us the following elevations in the manhole:

Inflow pipe invert 11435.09
Overflow pipe invert 11434.09
Outflow pipe invert 11432.59

Estimated floor of the adit near the portal is elevation 11438 +/-. The intake grate at the sump would be slightly lower, say 11437.5 I will defer to Ray and Karl the sizing of the sump and fall of the outlet pipe.

Hays: as soon as Harrison Western has mucked out some more and found the hard floor, please get an elevation so that we can finalize our numbers. 1 ft +/- will make a difference here.

Christoph

From: Petri, Elliott [Elliott.Petri@WestonSolutions.com]
Sent: Thursday, October 01, 2015 5:52 PM
To: Christoph Goss; Way, Steven; Matt Francis; Griswold, Hays (Griswold.Hays@epa.gov)
Cc: Ray Eldridge; Karl Fritz; Don Deere
Subject: RE: Flow Control Structure and Sump

See below for answers

Elliott Petri, PE

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From: Christoph Goss [mailto:christoph.goss@deereault.com]
Sent: Thursday, October 01, 2015 1:26 PM
To: Way, Steven <way.steven@epa.gov>; Matt Francis <m.francis@erllc.com>; Petri, Elliott <Elliott.Petri@WestonSolutions.com>; Griswold, Hays (Griswold.Hays@epa.gov) <Griswold.Hays@epa.gov>
Cc: Ray Eldridge <ray.eldridge@deereault.com>; Karl Fritz <karl.fritz@deereault.com>; Christoph Goss <christoph.goss@deereault.com>; Don Deere <don.deere@deereault.com>
Subject: Flow Control Structure and Sump

Gentlemen

We will evaluate how to best integrate the flow control structure with the existing/planned manhole and piping distribution system in the waste pile. Our concept is a grated trench/sump located near the portal brow (could be moved outside if a shed is constructed). The grate would be FRP and be traffic rated. The sump would have a 12" diameter outflow leading to the existing manhole. Inflow would be open channel flow from the adit floor or directly from an HDPE pipe attached to the flow control structure valve. The pipe end would have to be accessible to allow cleaning/jetting out of ferricrete and other pipe build up. Per our discussion yesterday, the design inflow will be 1000 gpm. We assume that adit floor elevations are as shown in our drawings.

We need the following information, today if possible:

•□□□□□□□□ Manhole location (northing and easting tied into Goff East Control Point) - This is approximate (37.894497/-107.638296) Lat /Long

•□□□□□□□□ Elevation of inflow pipe – 3.0 Ft below manhole lid/pin elevation provided to bottom of pipe (BOP)

•□□□□□□□□ Confirm 12" diameter inflow pipe – 12"

•□□□□□□□□ Outflow pipe elevation and diameter – 5.5 Ft from manhole lid to BOP, pipe is 12"

•□□□□□□□□ Overflow elevation and diameter – 4.0 Ft from manhole lid to BOP, pipe is 12"

•□□□□□□□□ Material of manhole (concrete, FRP, HDPE) Epoxy Coated Concrete

Christoph

Christoph Goss, PhD, PE

Civil Engineer, Principal

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